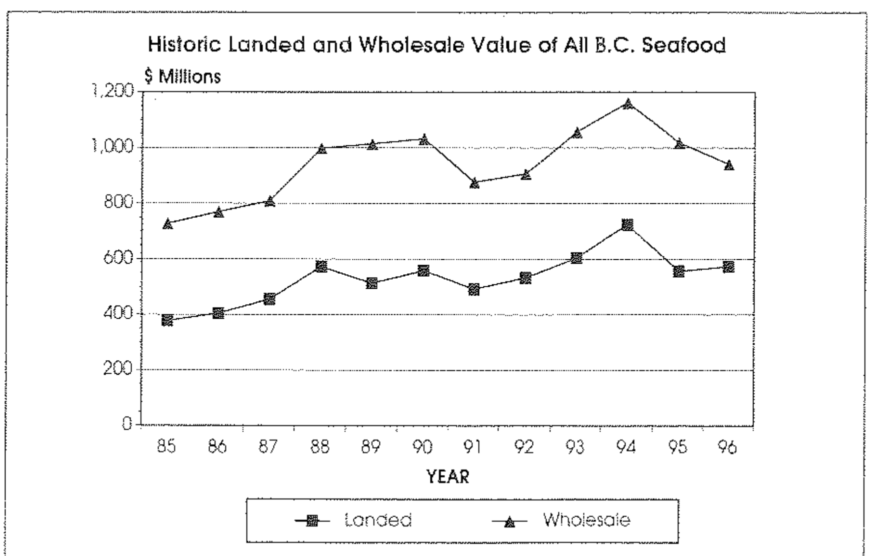
The 1996 British Columbia Seafood Industry Year in Review

BRITISH COLUMBIA Ministry of Agriculture, Fisheries and Food

A Dynamic Industry

The British Columbia seafood industry is undergoing dramatic change and restructuring but continues to occupy an important place in the provincial economy. In 1996, the estimated wholesale value of all British Columbia seafood products was $942 million. Seafood remained the province's number one food export, generating export sales in excess of $858 million.

British Columbia's seafood products are derived from over 80 different species of finfish, shellfish and plants. From commercial fishing and aquaculture through to processing, this sector employs over 20,000 people in full and part time positions. The seafood sector is especially important to the social and economic well-being of coastal communities. For example, 60% of the jobs on salmon vessels go to residents outside the urban cores of Vancouver and Victoria.



British Columbia Seafood Production 1994 to 1996									
	WHOLESALE VALUE ... $ MILLIONS ...			LANDED VALUE ... $ MILLIONS ...			LANDINGS ... '000 TONNES ...		
	1996E	1995P	1994	1996E	1995E	1994E	1996E	1995E	1994E
Salmon*									
Chinook	6.0	11.7	25.5	1.3	5.5	14.2	0.5	1.5	3.6
Sockeye	155.0	181.3	297.4	75.0	38.9	196.2	15.1	10.5	30.8
Coho	23.0	29.1	43.3	10.0	13.3	22.6	3.8	4.8	7.7
Pink	58.0	75.8	51.8	5.0	14.1	2.4	8.4	19.7	3.4
Chum	32.0	46.4	68.4	5.0	11.5	22.0	6.4	12.0	20.3
BC only 116.2 Subtotal	276.0	345.8	488.6	96.3	83.3	257.4	34.2	48.5	65.8
Farmed Salmon	172.0	165.0	158.0	154.8	148.5	142.2	26.7	24.8	23.7
Farmed Trout	0.3	0.5	0.5	0.3	0.5	0.5	0.05	0.10	0.09
Herring									
Spawn on Kelp	22.2	22.2	17.1	22.2	22.2	17.1	0.35	0.26	0.26
Roe Herring	153.0	159.4	173.5	71.0	67.0	77.0	21.7	26.2	40.0
Food and Bait	2.5	3.2	3.4	0.3	0.5	0.5	0.4	0.5	0.7
Subtotal	177.7	184.8	194.0	93.5	89.7	94.6	22.5	27.0	41.0
Halibut	50.9	44.8	52.6	32.5	32.6	37.0	4.1	4.1	4.4
Groundfish	99.2	112.2	120.4	69.1	75.7	90.9	145.8	130.3	173.1
Shellfish	163.1	162.8	138.8	124.4	123.8	99.5	30.3	30.5	27.5
Other	2.5	2.5	2.0	1.4	1.9	1.4	0.6	0.9	0.7
Grand Total	941.7	1,018.4	1,154.9	572.3	556.0	723.5	264.2	266.2	336.3

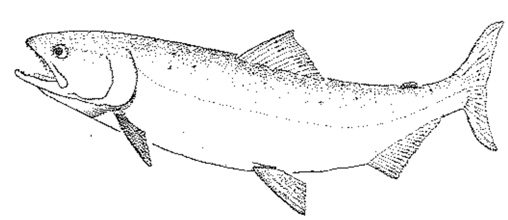
E Estimates
P Preliminary
* The total wholesale value of wild salmon includes the value of salmon products such as offal meal and oil which cannot be identified by species. The wholesale values of individual salmon species include the value of products derived from imported fish.

1996 Performance Highlights

The total 1996 British Columbia commercial seafood harvest largely repeated the performance of 1995. The value of the harvest to fishers and aquaculturists increased by 3% from the 1995 level to $572 million. At $942 million, the wholesale value of BC seafood products was down 8% from 1995.

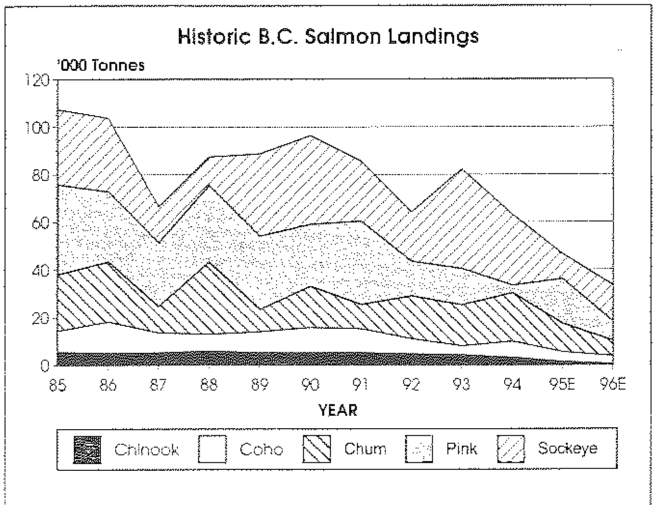
Seafood products other than salmon are increasingly important contributors to the overall stability of the provincial seafood industry. Over the past 20 years, the composition of seafood produced has changed with lower wild salmon and herring harvests offset by higher farmed salmon, shellfish and groundfish harvests and increased value-added processing.

The world supply of salmon has increased significantly, such that British Columbia is now a price-taker on world markets. Currently, British Columbia contributes only 4% to the total world production of wild and farmed salmon, estimated at 1.5 million tonnes in 1996.



WILD SALMON

1996 marked the second consecutive year in which there was a greatly reduced coastwide salmon harvest. Landings were only half of the 30 year average of 69,000 tonnes, and the lowest in 50 years. In 1996, salmon products contributed 29%, or $276 million, to the overall wholesale value of the seafood industry.



Sockeye

The sockeye harvest at 15,000 tonnes was better than the expected record low. Depressed harvest levels stemmed from very low Fraser River sockeye returns which were partially offset by record returns to the smaller Skeena and Nass River systems.

Sockeye is the primary generator of income for the British Columbia salmon industry. The landed value of the 1996 salmon fishery was $96 million, of which 78% or $75 million came from the harvest of sockeye.

Pink

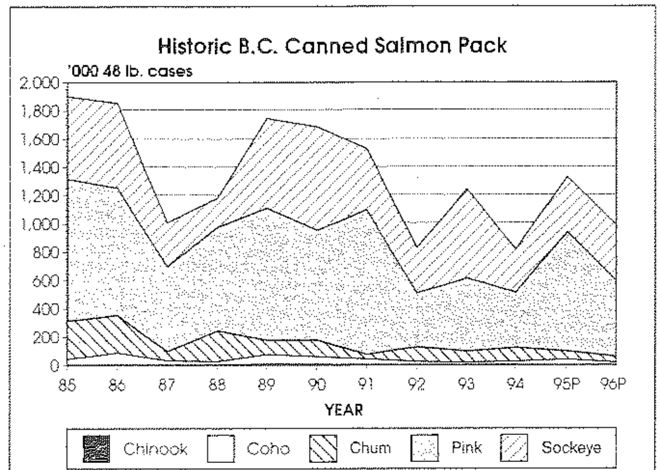
The 1996 domestic harvest of pink salmon of 8,000 tonnes represented a 60% drop from the 1995 level of 20,000 tonnes. There was also a significant decrease in price with the 1996 landed value of $5 million representing a 65% drop from the 1995 value of $14 million.

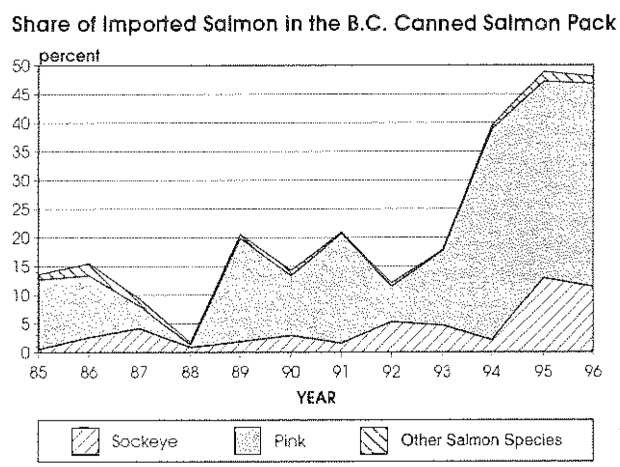
Canned Salmon

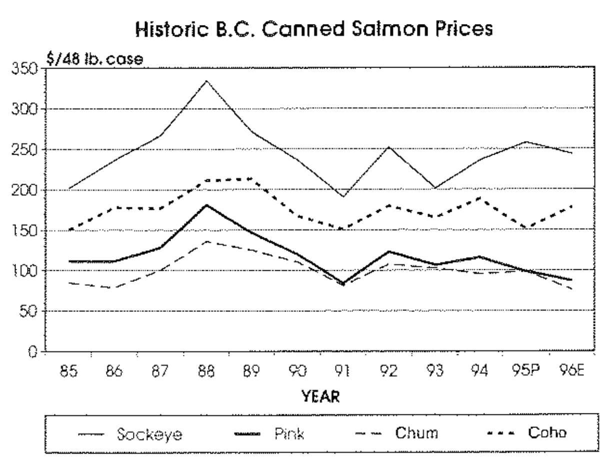
The 1996 canned salmon pack of 990,000 cases was 25% smaller than the 1995 pack. Pink and sockeye continued to be the primary canned salmon species contributing 94% of the total pack.

Supply shortfalls from the domestic salmon harvest were offset by imports of primarily U.S. fish for canning. In 1996, 48% of the total canned salmon pack was derived from imported fish. Over $90 million of British Columbia's estimated $276 million wholesale value of wild salmon flows from the canning of imported salmon.

The wholesale prices for canned sockeye, pink and chum salmon were all lower in 1996 than the







previous year. The combination of a smaller pack and lower prices was a significant contributor to the overall reduction in the total wholesale value of salmon products in 1996.

FARMED SALMON

The British Columbia farmed salmon industry continues to exhibit steady growth. The 1996 farm harvest, landed (farmgate) value, and wholesale value were all up from 1995 levels. Sixty-two percent, or $155 million, of the total landed value of British Columbia salmon was generated by the salmon aquaculture industry.

Increases in production of farmed salmon meant that for the first time, the wholesale value of British Columbia farmed salmon was comparable to the wholesale value of British Columbia wild-caught salmon. Both were estimated at $170-180 million this year.

HERRING

The harvest of herring spawn-on-kelp was up 35% to 350 tonnes in 1996, but because of weaker Japanese markets, the landed and wholesale values remained the same as 1995 at $22 million. Roe herring landings declined to 21,700 tonnes while the price paid to harvesters and processors for this product increased. The total wholesale value of herring products was estimated at $178 million for 1996.

HALIBUT

The landed volume and value of halibut remained relatively unchanged from 1995 levels. By contrast, the wholesale value of halibut products increased 14% to almost $51 million. With the bulk of halibut sold in fresh dressed form, the 10% increase in the wholesale price of this product was the main contributor to the increase in the total wholesale value.

GROUNDFISH

It was a difficult year for the groundfish industry in 1996 for many reasons. Prices were down significantly for many species. In 1996, the landed value of groundfish dropped to $69 million from $76 million in 1995. Similarly, the wholesale value fell from $112 million to $99 million. By contrast, the 1996 harvest increased by 12%, going from 130,000 tonnes in 1995 to 146,000 tonnes in 1996.

- The demand for British Columbia groundfish fillets weakened as Norway and other European countries recorded large cod landings.
- Hake landings increased to 100,000 tonnes but deliveries to domestic processors decreased. This was primarily because hake surimi processing slowed in 1996 as the market was soft. With minimal value added processing, hake's total wholesale value was $18 million, a 15% drop from 1994 levels.
- Pacific (grey) cod landings fell dramatically to 700 tonnes. This represents a decline of more than 80% in landing levels from the early 1990s, made necessary by significant conservation concerns.

British Columbia Groundfish Production 1994 to 1996

	WHOLESALE VALUE ... $ MILLIONS ...			LANDED VALUE ... $ MILLIONS ...			LANDINGS ... '000 TONNES ...		
	1996E	1995P	1994	1996E	1995E	1994E	1996E	1995E	1994E
Groundfish									
Dogfish	1.8	1.6	1.0	1.5	1.3	0.8	2.8	2.7	1.8
Hake	18.0	20.9	21.2	14.7	11.0	16.4	100.0	83.8	116.5
Lingcod	5.5	7.0	8.2	3.4	4.0	4.7	2.5	3.6	4.6
Pacific Cod	2.6	3.0	4.7	0.8	1.7	2.3	0.7	2.1	3.6
Pollock	2.3	3.1	4.4	0.9	1.2	1.5	2.2	3.2	4.5
Rockfish	27.0	25.8	25.4	16.0	18.0	21.3	21.1	18.8	22.8
Sablefish	25.0	34.5	36.8	22.1	29.2	34.6	2.8	3.9	5.2
Soles	10.0	12.0	14.5	4.7	6.4	6.6	4.9	7.6	8.5
Turbot	2.0	1.1	1.8	1.0	0.6	0.9	4.6	2.5	4.0
Other	5.0	3.2	2.4	4.0	2.3	1.8	4.2	2.1	1.6
Total	99.2	112.2	120.4	69.1	75.7	90.9	145.8	130.3	173.1

E Estimates
P Preliminary

SHELLFISH

The combined harvest of farmed and wild shellfish showed virtually no change from 1995 to 1996. The wild shellfish landed and wholesale values were down slightly but were offset by the higher prices reported by the farmed shellfish sector. Farmed scallops showed the most significant change with an increase in wholesale value from $200,000 in 1995 to $1 million in 1996. The increase was due to the doubling of shucked meat production, combined with a 22% rise in shucked meat prices.

Much of the shellfish harvest of geoducks, prawns, scallops and other species is now sold live to the restaurant trade. This practice has buoyed prices.

British Columbia Shellfish Production 1994 to 1996

	WHOLESALE VALUE ... $ MILLIONS ...			LANDED VALUE ... $ MILLIONS ...			LANDINGS ... '000 TONNES ...		
	1996E	1995P	1994	1996E	1995E	1994E	1996E	1995E	1994E
Farmed									
Clams	5.5	5.3	3.1	4.1	3.9	1.9	0.9	0.9	0.5
Oysters	8.0	7.0	6.9	6.1	5.4	4.6	5.3	5.4	5.0
Scallops	1.0	0.2	0.2	0.9	0.2	0.2	0.14	0.02	0.03
Subtotal	14.5	12.5	10.2	11.1	9.5	6.7	6.3	6.3	5.5
Wild									
Clams	4.5	5.7	6.8	3.4	4.2	4.1	1.3	1.7	1.8
Crabs	31.0	32.4	34.5	23.4	23.6	25.7	4.9	4.6	6.0
Geoducks	39.0	43.7	39.8	34.8	41.7	33.4	1.8	2.1	2.2
Scallops	0.6	0.6	0.6	0.5	0.5	0.5	0.1	0.1	0.1
Sea Urchins	22.0	21.1	18.3	12.0	11.1	10.2	5.8	6.3	6.2
Sea Cucumbers	2.0	2.7	3.9	0.6	1.0	1.0	0.3	0.6	0.6
Shrimp/Prawns	47.0	42.1	22.4	37.5	31.4	16.9	9.1	8.1	4.5
Other	2.5	2.0	2.3	1.1	0.8	1.0	0.7	0.7	0.6
Subtotal	148.6	150.3	128.6	113.3	114.3	92.8	24.0	24.2	22.0
Total	163.1	162.8	138.8	124.4	123.8	99.5	30.3	30.5	27.5

E Estimates
P Preliminary

MARINE PLANTS

The commercial harvest of marine plants primarily targets the species *Macrocystis integrifolia* for the herring spawn-on-kelp industry. In 1996, 79% of all licenses issued for marine plant harvesting were for this species. The remainder of the licences were issued for the harvest of other marine plant species which were processed into dried and fresh products for human consumption or manufactured into fertilizer. A total of 146 tonnes of marine plants were harvested in 1996.

British Columbia Marine Plant Production 1994 to 1996

	LICENCES			LANDINGS TONNES		
SPECIES	1996	1995	1994	1996	1995	1994
Macrocystis integrifolia (Spawn-on-kelp)	38	36	36	110.0	97.9	138.0
Other Kelp (*Nereocystis sp., Laminaria sp.*)	8	9	6	35.0	9.6	3.0
Salicornia sp.	2	3	2	1.5	1.0	2.0

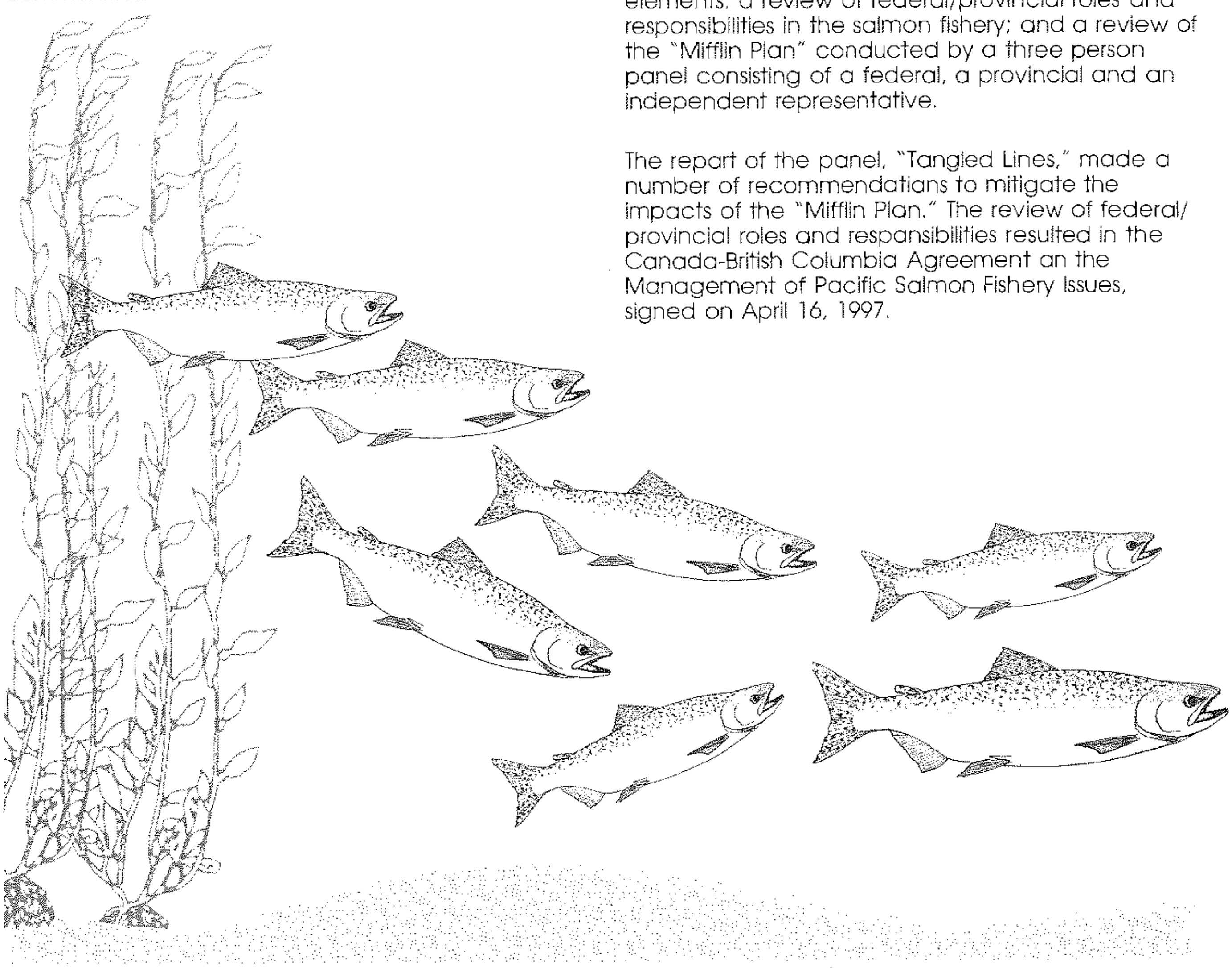
Significant Events in 1996

1996 was a watershed year in the seafood industry. Most notably, the province began the process of securing a greater role in fisheries management.

PACIFIC SALMON REVITALIZATION PLAN

On March 29, 1996 the federal Minister of Fisheries and Oceans, the Honourable Fred Mifflin, announced the Pacific Salmon Revitalization Plan, which came to be known as the "Mifflin Plan." One of the plan's objectives was to reduce the Pacific salmon commercial fishing fleet by half. The fleet reduction was considered necessary to make the commercial salmon fishery economically viable and to meet conservation objectives.

Key elements included a federally funded licence buy-back, area licensing and licence stacking. The plan was highly controversial due to the effect on fishers, dependent businesses and coastal communities.



B.C. JOB PROTECTION COMMISSION

In June 1996, the Government of British Columbia requested an investigation by the B.C. Job Protection Commission (JPC) into the effects of both the Pacific Salmon Revitalization Plan and the poor 1996 salmon season. The JPC produced a report entitled "Fishing for Answers" which assessed the major socio-economic impacts of these factors. The report estimated that 2,895 jobs were lost due to the Mifflin Plan; another 2,730 jobs were lost due to the poor 1996 season.

CANADA-BRITISH COLUMBIA MEMORANDUM OF UNDERSTANDING ON FISHERIES ISSUES

On July 15, 1996 the Canada-British Columbia Memorandum of Understanding on Fisheries Issues (MOU) was signed. The MOU focused on two key elements: a review of federal/provincial roles and responsibilities in the salmon fishery; and a review of the "Mifflin Plan" conducted by a three person panel consisting of a federal, a provincial and an independent representative.

The report of the panel, "Tangled Lines," made a number of recommendations to mitigate the impacts of the "Mifflin Plan." The review of federal/provincial roles and responsibilities resulted in the Canada-British Columbia Agreement on the Management of Pacific Salmon Fishery Issues, signed on April 16, 1997.

PACIFIC SALMON TREATY

The impasse on the 1985 Canada-U.S. Pacific Salmon Treaty entered its third year in 1996. A number of the Treaty's annexes have expired, and numerous efforts to renegotiate these and develop new long term arrangements have not yet been successful.

The Government of British Columbia supports the Treaty and believes that the salmon resource, fishing employment base, and communities in both countries will be better off when the Treaty's principles of conservation and equity are fully implemented. To that end, British Columbia has taken a leading role in insisting that Canada continue to press for resolution of this issue with the United States.

FISHERIES AND SEAFOOD DEVELOPMENT

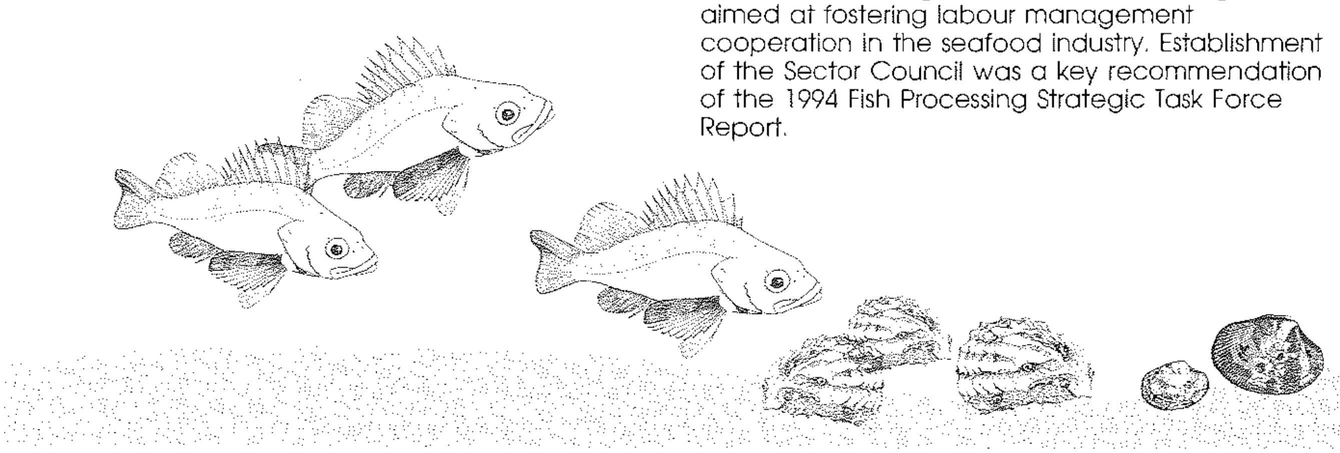
The Ministry of Agriculture, Fisheries and Food's fisheries and seafood development program continues to evolve to address the priorities of industry and government. In 1996, the program focused on by-catch reduction/responsible fishing, by-product utilization and enhancement of existing fisheries databases.

1996 milestones include:

- **Emerging Species Fisheries** — The neon flying squid and mackerel/pilchard fisheries had their first commercial season in 1996. While harvests for both fisheries were modest, significant increases are expected in future years.
- **Responsible Fishing** — Gear selectivity trials were conducted to investigate possible technical solutions to by-catch problems in the commercial sector. Government funded projects with the shrimp beam trawl, groundfish trawl, salmon purse seine and gillnet sectors provided encouraging results for addressing this issue.
- **Fish Processing Waste Water** — The Ministry of Agriculture, Fisheries and Food, in cooperation with industry and regulatory agencies, initiated a two year study to investigate best available technologies to: 1) improve the effluent stream being discharged to the environment; 2) reduce water usage and improve the cost effectiveness of fish processing; and 3) enhance the protein recovery from the effluent stream.
- **Fisheries Databases** — In 1996, programs for the development of biological and other related information systems were implemented for red and green sea urchins, squid, shrimp, tanner crab, mackerel/pilchards, and Venus clams. These databases will provide reliable and timely information to support harvest-management decisions for developing sustainable fisheries.
- **Product Diversification** — The 1996 census of BC fish processors revealed significant amounts of fish being processed into several new and/or unique seafood products. Portioned, dried and salted products as well as other value added products such as surimi, paste, balls and fish cakes were derived from many of the groundfish species in 1996. Farmed salmon sales included substantial amounts of roe products from the three major species; chinook, coho, and Atlantic salmon. Most products are unique to particular companies with only halibut cheeks and dried geoduck meat reported by more than three companies.

BRITISH COLUMBIA SEAFOOD SECTOR COUNCIL

In 1996, the Ministry of Agriculture, Fisheries and Food provided a grant to the Fisheries Council of British Columbia and the United Fishermen and Allied Workers Union to develop terms of reference and an implementation plan for founding the British Columbia Seafood Sector Council. The purpose of the Sector Council is to improve the economic health of the seafood processing industry in British Columbia. The Council will conduct research, education, training and consensus-building activities aimed at fostering labour management cooperation in the seafood industry. Establishment of the Sector Council was a key recommendation of the 1994 Fish Processing Strategic Task Force Report.



The Look Ahead

CANADA-BRITISH COLUMBIA AGREEMENT ON THE MANAGEMENT OF PACIFIC SALMON FISHERY ISSUES

On April 16, 1997, the governments of Canada and British Columbia signed a historic agreement on the management of Pacific salmon fishery issues. The agreement will provide new measures to protect fish stocks and habitat, develop jobs in the fishery and determine new roles for fishing communities and stakeholders. The agreement establishes a framework for the Canada-British Columbia Council of Fisheries Ministers, the Pacific Fisheries Conservation Council and the Fisheries Renewal Advisory Board. It also provides $15 million each from Canada and British Columbia for habitat restoration along with a commitment to streamline services delivered by the two governments.

ENVIRONMENTAL ASSESSMENT REVIEW OF SALMON AQUACULTURE

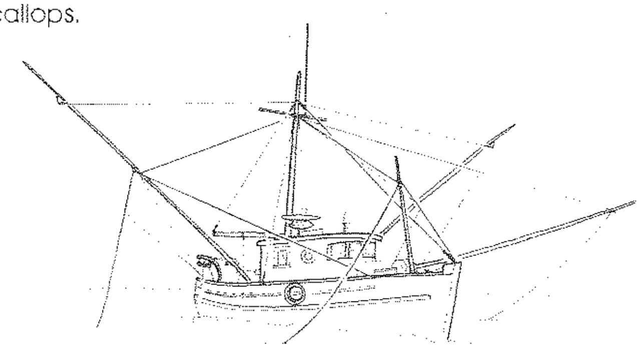
The final report from the Environmental Assessment Office (EAO) of salmon aquaculture is due to be submitted to the Ministers of Agriculture, Fisheries and Food and Environment, Lands and Parks in July 1997. During the two years of its mandate, the review has solicited broad public input, along with detailed scientific analysis of the industry. In April, 1997 technical papers on the five main subject areas (Fish Escapes, Fish Health, Waste, Interactions with Marine Mammals, and Siting) were released, along with the findings and recommendations of the experts hired by the EAO. These recommendations are now being assessed by the EAO as to their implications for industry, communities, and government.

GROUNDFISH

After eight months of negotiations, a new long term groundfish trawl management plan was implemented on April 1, 1997. The plan calls for 80% of the Total Allowable Catch to be allocated directly to the vessels as Individual Vessel Quotas. The remaining 20% is to be allocated to the vessels on a yearly basis based on the recommendations of a Groundfish Development Authority (GDA). The GDA consists of representatives from shoreworkers, crews and coastal communities. This innovative management plan ensures that the interests of a broad range of industry stakeholders are addressed in an ongoing manner.

Seafood Outlook

Estimates for 1997 seafood production in British Columbia show a marginal increase in overall catch and value, compared to 1996. The 1997 wild salmon harvest is expected to be considerably higher than the past two years, as this will be a high return year in the four-year Fraser River sockeye cycle. The total harvest, however, will be below recent averages as conservation concerns for both chinook and coho remain significant. Herring harvests are expected to increase significantly, as stocks improve. Halibut landings will also be increased as new modeling for stocks show greater abundance than was previously thought. Most groundfish harvests are predicted to be up as quotas are increased, with the hake harvest expected to increase significantly. Some shellfish species may also demonstrate minor increases in landings and values. Estimates for aquaculture production in British Columbia indicate an overall increase in production and value. Farmed salmon production is expected to remain at levels similar to 1996. Shellfish production, however, is expected to show continued growth as new production technologies are brought into wider use for traditional species such as oysters, clams and now scallops.



This is the fifth issue of the British Columbia Seafood Industry Year in Review series. We encourage you to send us your comments on this publication and any suggestions for future issues. For more information, call or write: Aquaculture and Commercial Fisheries Branch, Ministry of Agriculture, Fisheries and Food, P.O. Box 9120 Stn Prov Gov't, Victoria, British Columbia, V8W 9B4. Location: 808 Douglas Street. (Telephone 250-387-1160; fax 250-356-7280).

Data Sources: All seafood finished products and wholesale values as well as aquaculture industry harvests and farmgate values are collected by the Aquaculture and Commercial Fisheries Branch of the Ministry of Agriculture, Fisheries and Food. Commercial fisheries landings and values are provided by the Department of Fisheries and Oceans, Pacific Region. 1994, 1995 and 1996 preliminary values have been adjusted.

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